

### FlexPoint<sup>TM</sup> DC Converter

CUSTOMER Order toll-free in the U.S.: Call 877-877-BBOX SUPPORT (outside U.S. call 724-746-5500)

INFORMATION FREE technical support 24 hours a day, 7 days a week; Call 724-746-5500 or fax 724-746-0746

> Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 Web site: www.blackbox.com

E-mail: info@blackbox.com

#### **General Description:**

Designed for telecommunications environments such as campuses and phone centers, that use DC power as a primary source. The FlexPoint DC converter provides a user with the ability to power a single media converter with DC power.

#### **Site Preparation Requirements:**

- 1. Power: Assure the DC power can supply 1.0A of current.
- 2. This equipment requires 18-60 VDC / 1.0 Amps of power. Appropriate overloading protection should be provided on all DC power source outlets utilized.
- 3. Wiring methods used for the connection of the equipment to the primary power supply shall be in accordance with the National Electrical Code, ANSI/NFPA 70, and the Canadian Electrical Code, Part I, C22.1.

WARNING: Only a DC power source that complies with safety extra low voltage (SLEV) requirements can be connected to the DC-input power supply.

#### **Tools and Equipment Required:**

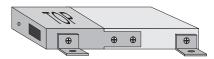
Phillips-head screwdriver (not supplied) Flat-head screwdriver (not supplied)

Wire cutter/stripper (not supplied)

Three-conductor 14 AWG copper power cable (recommended; not supplied)

Preparation:

Assure that the FlexPoint DC Converter is physically installed in accordance with the Site Preparation Requirements outlined earlier in this document.



#### WARNING REGARDING EARTHING GROUND:

- a) This equipment shall be connected to the DC supply system earthing electrode conductor or to a bonding iumper from an earthing terminal bar or bus to which the DC supply system earthing electrode is connected.
- b) This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC supply circuit and the earthing conductor, and also the point of earthing of the DC system. The DC system shall not be earthed elsewhere.
- c) The DC supply source is to be located within the same premises as this equipment.
- d) There shall be no switching or disconnecting devices in the earthed circuit conductor between the DC source and the earthing electrode conductor.

WARNING: Note the wire colors used for making the positive, negative and ground connections. Use the same color assignment for the connection at the circuit breaker.

#### Cabling and Power-Up:

- 1. Securely attach the FlexPoint DC Converter to a FlexPoint media converter using (4) phillips-head screws (refer to illustration).
- 2. If desired attach the optional wall-mounting brackets (part number 4381) and securely fasten to desired location (refer to illustration).
- 3. Assure that the DC circuit breaker can supply 1.0A of current to the power supply.
- 4. Locate the DC circuit breaker, and switch the DC circuit breaker to the OFF position.
- 5. Cut the power cable to the length required.
- 6. Strip approximately 3/8 of an inch of insulation from the power cable wires.
- 7. Connect the power cables to the FlexPoint DC Converter by fastening the stripped ends to the DC
- 8. Connect the power cables to the circuit breaker and switch the circuit breaker ON.
- 9. Check the power LED on the back panel of the FlexPoint DC Converter. The LED should be ON.
- 10. Check the power LED on the front pannel of the attached FlexPoint Media Converter. The LED should be ON.

© Copyright 2001. Black Box Corporation. All rights reserved.

1000 Park Drive • Lawrence, PA 15055-1018 724-746-5500 • Fax 724-746-0746

# lack Box Corporation

### FlexPoint<sup>TM</sup> DC Converter

#### **General Description:**

Designed for telecommunications environments such as campuses and phone centers, that use DC power as a primary source. The FlexPoint DC converter provides a user with the ability to power a single media converter with DC power.

#### Site Preparation Requirements:

- 1. Power: Assure the DC power can supply 1.0A of current.
- 2. This equipment requires 18-60 VDC / 1.0 Amps of power. Appropriate overloading protection should be provided on all DC power source outlets utilized.
- 3. Wiring methods used for the connection of the equipment to the primary power supply shall be in accordance with the National Electrical Code. ANSI/NFPA 70, and the Canadian Electrical Code, Part I, C22.1.

WARNING: Only a DC power source that complies with safety extra low voltage (SLEV) requirements can be connected to the DC-input power supply.

#### CUSTOMER Order toll-free in the U.S.: Call 877-877-BBOX SUPPORT (outside U.S. call 724-746-5500)

INFORMATION FREE technical support 24 hours a day, 7 days a week; Call 724-746-5500 or fax 724-746-0746

Mailing address: Black Box Corporation. 1000 Park Drive, Lawrence, PA 15055-1018

Web site: www.blackbox.com E-mail: info@blackbox.com

#### **Tools and Equipment Required:**

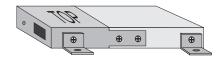
Phillips-head screwdriver (not supplied) Flat-head screwdriver (not supplied)

Wire cutter/stripper (not supplied)

Three-conductor 14 AWG copper power cable (recommended; not supplied)

#### Preparation:

Assure that the FlexPoint DC Converter is physically installed in accordance with the Site Preparation Requirements outlined earlier in this document.



#### **WARNING REGARDING EARTHING GROUND:**

- a) This equipment shall be connected to the DC supply system earthing electrode conductor or to a bonding jumper from an earthing terminal bar or bus to which the DC supply system earthing electrode is connected.
- b) This equipment shall be located in the same immediate area (such as, adjacent cabinets) as any other equipment that has a connection between the earthed conductor of the same DC supply circuit and the earthing conductor, and also the point of earthing of the DC system. The DC system shall not be earthed elsewhere.
- c) The DC supply source is to be located within the same premises as this equipment.
- d) There shall be no switching or disconnecting devices in the earthed circuit conductor between the DC source and the earthing electrode conductor.

WARNING: Note the wire colors used for making the positive, negative and ground connections. Use the same color assignment for the connection at the circuit breaker.

#### Cabling and Power-Up:

- 1. Securely attach the FlexPoint DC Converter to a FlexPoint media converter using (4) phillips-head screws (refer to illustration).
- 2. If desired attach the optional wall-mounting brackets (part number 4381) and securely fasten to desired location (refer to illustration).
- 3. Assure that the DC circuit breaker can supply 1.0A of current to the power supply.
- 4. Locate the DC circuit breaker, and switch the DC circuit breaker to the OFF position.
- 5. Cut the power cable to the length required.
- 6. Strip approximately 3/8 of an inch of insulation from the power cable wires.
- 7. Connect the power cables to the FlexPoint DC Converter by fastening the stripped ends to the DC connector.
- 8. Connect the power cables to the circuit breaker and switch the circuit breaker ON.
- 9. Check the power LED on the back panel of the FlexPoint DC Converter. The LED should be ON.
- 10. Check the power LED on the front pannel of the attached FlexPoint Media Converter. The LED should be ON.

© Copyright 2001. Black Box Corporation. All rights reserved.

1000 Park Drive • Lawrence, PA 15055-1018 724-746-5500 • Fax 724-746-0746

#### WARNING!

NEVER ATTEMPT TO OPEN OR SERVICE
THE POWER SUPPLY UNIT.
OPENING THE POWER SUPPLY UNIT MAY
CAUSE SERIOUS INJURY OR DEATH.

#### **LED Indicators:**

**LED Color Description**Power: Yellow Power applied

#### **Specifications:**

**LED Indicators:** 

Specifications:

Power Input

Temperature:

Humidity:

Color

Yellow

I FD

Power:

Dimensions / Weight: W:3.0"xD:3.0"xH:1.0" / 6oz.

Power Input +/- 18-60 VDC/1.0 Amps Input

WARNING!

**NEVER ATTEMPT TO OPEN OR SERVICE** 

THE POWER SUPPLY UNIT.

OPENING THE POWER SUPPLY UNIT MAY

CAUSE SERIOUS INJURY OR DEATH.

Description

Dimensions / Weight: W:3.0"xD:3.0"xH:1.0" / 6oz.

Power applied

0 to 40 degrees C

0-90% (non-condensing)

+/- 18-60 VDC/1.0 Amps Input

Temperature: 0 to 40 degrees C

Humidity: 0-90% (non-condensing)

#### TRADEMARKS

All applied-for and registered trademarks are the property of their respective owners.

## FEDERAL COMMUNICATIONS COMMISSION AND CANADIAN DEPARTMENT OF COMMUNICATIONS RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to be cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numéirques de las classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

#### TRADEMARKS

All applied-for and registered trademarks are the property of their respective owners.

## FEDERAL COMMUNICATIONS COMMISSION AND CANADIAN DEPARTMENT OF COMMUNICATIONS RADIO FREQUENCY INTERFERENCE STATEMENTS

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to be cause interference, in which case the user at his own expense will be required to take whatever measures may be necessary to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numéirques de las classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par le ministère des Communications du Canada.

#### NORMAS OFICIALES MEXICANAS (NOM)

#### ELECTRICAL SAFETY STATEMENT

- Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
- Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
- Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
- Todas las instrucciones de operación y uso deben ser seguidas.
- El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
- 6. El aparato eléctrico debe ser usado únicamente con carritos o pedelstales que sean recomendados por el fabricante.
- El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
- Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
- 9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra or superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
- El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u ostros aparatos (incluyendo amplificadores) que producen calor.
- El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

- Precación debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.
- 13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
- El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
- En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.
- El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
- Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.
- Servicio por personal calificado deberá ser provisto cuando:
   A: El cable de poder o el contacto ha sido dañado; u
- B: Objectos han caído o líquido ha sido derramado dentro del aparato; o
- C: El aparato ha sido expuesto a la lluvia; o
- D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
- E: El aparto ha sido tirado o su cubierta ha sido dañada.

040-01017-001 01/01/01

#### NORMAS OFICIALES MEXICANAS (NOM)

#### ELECTRICAL SAFETY STATEMENT

- Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
- Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
- Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
- Todas las instrucciones de operación y uso deben ser seguidas.
- El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
- 6. El aparato eléctrico debe ser usado únicamente con carritos o pedelstales que sean recomendados por el fabricante.
- El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
- Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
- 9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra or superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
- El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u ostros aparatos (incluyendo amplificadores) que producen calor.
- El aparato eléctrico deberá ser connectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.

- 12. Precación debe ser tomada de tal manera que la tierra fisica y la polarización del equipo no sea eliminada.
- 13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
- El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
- En caso de existir, una antena externa deberá ser localizada lejos de las lineas de energia.
- 16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
- Cuidado debe ser tomado de tal manera que objectos liquidos no sean derramados sobre la cubierta u orificios de ventilación.
- Servicio por personal calificado deberá ser provisto cuando:
   A: El cable de poder o el contacto ha sido dañado; u
  - B: Objectos han caído o líquido ha sido derramado dentro del aparato; o
  - C: El aparato ha sido expuesto a la lluvia; o
  - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
  - E: El aparto ha sido tirado o su cubierta ha sido dañada.

040-01017-001 01/01/01